

(FILE 'HOME' ENTERED AT 13:20:20 ON 04 JUN 2003)

FILE 'REGISTRY' ENTERED AT 13:20:34 ON 04 JUN 2003

L1 1 S ISOBORNYL METHACRYLATE/CN
L2 1 S ISOBORNYL ACRYLATE/CN
L3 1282 S 7534-94-3/CRN
L4 1617 S 5888-33-5/CRN
L5 2889 S L3 OR L4
L6 2881 S L5 AND ACID
L7 0 S L6 AND GLYCIDYL
L8 10564 S GLYCIDYL
L9 106 S L8 AND L6
L10 2 S L6 AND OXETAN
L11 9 S L6 AND OXETAN?

FILE 'CA' ENTERED AT 13:24:07 ON 04 JUN 2003

L12 6 S L11
L13 87 S L9
L14 20 S L9 AND PHOTO?
L15 182 S L5 AND GLYCIDYL
L16 38 S L15 AND PHOTO?
L17 22 S L16 NOT L14
L18 188 S L5 AND GLYCIDYL?
L19 40 S L5 AND GLYCIDYL? AND PHOTO?
L20 2 S L19 NOT L16

=> log y

STN Database
searches
Cited in Search Notes
Do Not Remove from
File Cynthia Hamilton
CYNTHIA HAMILTON
PRIMARY EXAMINER

FILE 'REGISTRY' ENTERED AT 13:46:33 ON 04 JUN 2003
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 3 JUN 2003 HIGHEST RN 524916-37-8
DICTIONARY FILE UPDATES: 3 JUN 2003 HIGHEST RN 524916-37-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STN Note 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

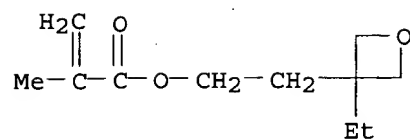
=> s 249903-81-9
L1 1 249903-81-9
(249903-81-9/RN)

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN 249903-81-9 REGISTRY
CN 2-Propenoic acid, 2-methyl-, 2-(3-ethyl-3-oxetanyl)ethyl ester, polymer
with ethenylbenzene, methyl 2-methyl-2-propenoate, oxiranylmethyl
2-methyl-2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-
2-yl 2-propenoate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Propenoic acid, (1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester,
rel-, polymer with ethenylbenzene, 2-(3-ethyl-3-oxetanyl)ethyl
2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and oxiranylmethyl
2-methyl-2-propenoate (9CI)
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene,
2-(3-ethyl-3-oxetanyl)ethyl 2-methyl-2-propenoate, oxiranylmethyl
2-methyl-2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-
2-yl 2-propenoate (9CI)
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with
ethenylbenzene, 2-(3-ethyl-3-oxetanyl)ethyl 2-methyl-2-propenoate, methyl
2-methyl-2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-
2-yl 2-propenoate (9CI)
CN Benzene, ethenyl-, polymer with 2-(3-ethyl-3-oxetanyl)ethyl
2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, oxiranylmethyl
2-methyl-2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-
2-yl 2-propenoate (9CI)
FS STEREOSEARCH
MF (C13 H20 O2 . C11 H18 O3 . C8 H8 . C7 H10 O3 . C5 H8 O2)x
CI PMS
PCT Polyacrylic, Polyether, Polyether formed, Polystyrene
SR CA
LC STN Files: CA, CAPLUS

CM 1

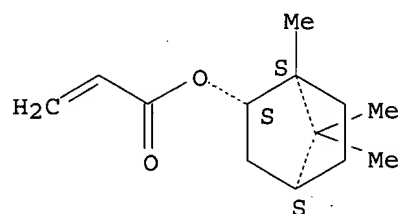
CRN 249903-80-8
CMF C11 H18 O3



CM 2

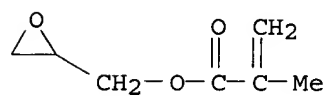
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



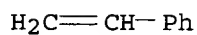
CM 3

CRN 106-91-2
CMF C7 H10 O3



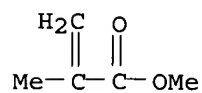
CM 4

CRN 100-42-5
CMF C8 H8



CM 5

CRN 80-62-6
CMF C5 H8 O2



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

2.48

2.69

L14 ANSWER 9 OF 20 CA COPYRIGHT 2003 ACS

AN 136:393285 CA

TI **Photosolder** resist composition for printed circuit boards

IN Yabuuchi, Naoya; Fujita, Minoru; Namba, Osamu; Okajima, Keiichi

PA Nippon Paint Co., Ltd., Japan

SO Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM G03F007-033

ICS G03F007-038

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 37, 38, 76

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | EP 1207424 | A1 | 20020522 | EP 2001-127225 | 20011116 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | JP 2002236363 | A2 | 20020823 | JP 2001-335994 | 20011101 |
| | US 2002090573 | A1 | 20020711 | US 2001-988036 | 20011116 |
| PRAI | JP 2000-351298 | A | 20001117 | | |
| | JP 2001-335994 | A | 20011101 | | |

AB A **photosolder** resist compn. of the invention is characterized by contg. (A) a resin contg. radical polymn. groups and carboxyl groups obtained by adding a cyclic ether group of a cyclic ether group-contg. vinyl monomer to a carboxylic group of a radical copolymer contg. at least isobornyl (meth)acrylate acrylate and a carboxyl group-contg. vinyl monomer as monomer units; (B) an inorg. filler; and (C) a **photocurable** mixt. of a polyfunctional acrylic monomer (c1), a cyclic ether group-contg. compd. (c2), and a **photopolymn.** initiator (c3). The **photosolder** resist compns. according to the present invention were found excellent in the development property, in elec. insulating property, solder heat resistance, gold plating resistance and thermal impact resistance.

ST printed circuit board **photosolder** resist compn

IT Butadiene rubber, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(epoxidized, Epoleed PB 3600; **photosolder** resist compn. for printed circuit boards)

IT **Photoresists**

Printed circuit boards

(**photosolder** resist compn. for printed circuit boards)

IT 105809-30-1

RL: TEM (Technical or engineered material use); USES (Uses)
(M 208; **photosolder** resist compn. for printed circuit boards)

IT 4687-94-9, VR 77

RL: TEM (Technical or engineered material use); USES (Uses)
(VR 77; **photosolder** resist compn. for printed circuit boards)

IT 9003-17-2

RL: TEM (Technical or engineered material use); USES (Uses)
(butadiene rubber, epoxidized, Epoleed PB 3600; **photosolder** resist compn. for printed circuit boards)

IT 100752-97-4, Diethylthioxanthone

RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)

(**photopolymn.** initiator; **photosolder** resist compn. for printed circuit boards)

IT 71868-10-5, Irgacure 907

RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)

(**photosolder** resist compn. for printed circuit boards)

IT 428505-57-1P, Glycidyl methacrylate-isobornyl methacrylate-

L1 ANSWER 1 OF 2 CA COPYRIGHT 2003 ACS
 AN 124:356233 CA
 TI Alkali-developable photoresist composition for preparing circuit boards
 IN Shioda, Atsushi; Hashimoto, Kazumi; Chiba, Hideki
 PA Japan Synthetic Rubber Co Ltd, Japan
 SO Jpn. Kokai Tokkyo Koho, 16 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03F007-038
 ICS G03F007-027; G03F007-028; G03F007-032; H05K003-06; H05K003-18;
 H05K003-28
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 76

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|---------------------------|--------------|-----------------|--------------|
| PI | JP 08029980 | A2 | 19960202 | JP 1994-185346 | 19940714 <-- |
| PRAI | JP 1994-185346 | | 19940714 | | |
| AB | The title photoresist compn. contains (a) an unsatd. group-contg. polycarboxylic acid resin prepd. by reaction of a copolymer of unsatd. carboxylic acids and other radically polyimg. compds. with an epoxy group-contg. radically polyimg. compd., (b) a polyimg. compd. having .gtoreq.1 ethylenic unsatd. double bond, and (c) a photopolymn. initiator. The compn. shows good alkali-developability, high resoln. even if its film is thick, and improved resistance to plating, chems., and soft solder. Thus, a photoresist compn. comprised a resin prepd. by reaction of <u>methacrylic acid-dicyclopentanyl methacrylate-butadiene copolymer</u> with <u>glycidyl methacrylate</u> , Aronix M-8060 (monomer), and Irgacure 369 (photopolymn. initiator). | | | | |
| ST | polycarboxylic acid resin photoresist; circuit board photoresist compn | | | | |
| IT | Resists (photo-, alkali-developable photoresist compn. contg. unsatd. polycarboxylic acid resin) | | | | |
| IT | 177017-77-5P | 177017-78-6P | 177017-79-7P | 177017-80-0P | 177017-81-1P |
| | 177017-82-2P | 177017-83-3P | 177017-84-4P | 177017-85-5P | |
| | RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (alkali-developable photoresist compn. contg. unsatd. polycarboxylic acid resin) | | | | |
| IT | 15625-89-5, Kayarad TMPTA | 62886-89-9, Aronix M 8060 | 64401-02-1 | | |
| | 93294-97-4, Kayarad DPCA 60 | | | | |
| | RL: TEM (Technical or engineered material use); USES (Uses) (alkali-developable photoresist compn. contg. unsatd. polycarboxylic acid resin) | | | | |

Ne 030x4

=> D ALL 2

L1 ANSWER 2 OF 2 CA COPYRIGHT 2003 ACS
 AN 108:178503 CA
 TI Dielectric ceramics
 IN Yokoya, Yoichiro; Kato, Junichi; Mihara, Toshihiro
 PA Matsushita Electric Industrial Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM C04B035-46
 ICS C04B035-00; H01B003-12
 ICA H01G004-12
 CC 76-10 (Electric Phenomena)
 Section cross-reference(s): 57